

DISTRESS BEACONS

TH.C.985/6

EQUIPPED WITH TUBES OR TRANSISTORS.

The TH. C. 935 (tube type) or TH. C. 986 (transistor type) subminiature transmitter-receiver, of lightweight construction and reliable, straightforward and automatic

NAL DE DÉTRESSE ER SUR L'ANNEAU RÉCEPTION

TH. C. 985

Tube version

TH. C. 986 Transistor version operation enables a castaway to contact a search and rescue aircraft equipped with a homing receiver (ARC 34 or 1750 channels UHF) or a radio-compass such as the ARA 25.

By pulling the switch-on handle, the antenna unfolds itself and the beacon automatically transmits a modulated telegraphic signal (A2).

The exchange of instructions is then effected by telephone (A3) by means of a send/receive changeover.

The equipment is thoroughly waterproof (tests in 4-metre deep water).

Maximum run time : over 30 hours.

TH. C. 985/6 beacons can be preset at the factory stage within the 238-248 Mc/s band.





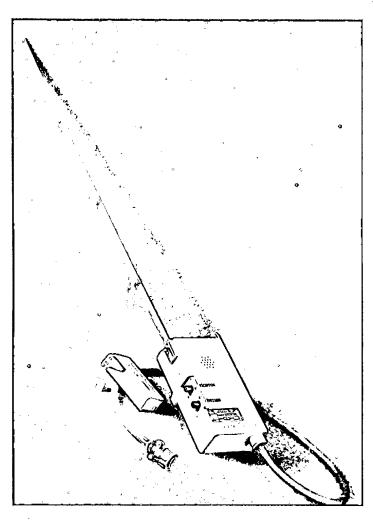
DISTRESS BEACONS EQUIPPED WITH TUBES OR TRANSISTORS TH. C. 985/6

* DESCRIPTION

The whole equipment is made up of two distinct watertight cabinets connected by means of a flexible cord:

- The transmitter-receiver unit, of light-alloy, rugged construction; its volume is less than 1/2 cubic decimeter antenna foldable.
- A LT battery or a secondary battery of large capacity per unit of mass.

Both can be secured to the rescue jacket in the pockets provided for this purpose. When used on board a rubber dinghy, the transmitter-receiver cabinet can be fixed on the lapel of the pilot's jacket, which saves him having to hold the equipment for many hours; he will only hold it to set up a telephone send receive communication. The antenna unfolds itself vertically, the microphone-



TH. C. 986. Transistor version

earpiece is close enough to enable the pilot to speak and listen under normal conditions.

Due to its elongated shape, the transmitter-receiver can be held firmly in the right hand, between the thumb and the four other fingers. It is then easy to free the forefinger and middle finger to actuate the two switch-over keys.

* OPERATION

Pull the switch-on handle: the equipment is automatically started.

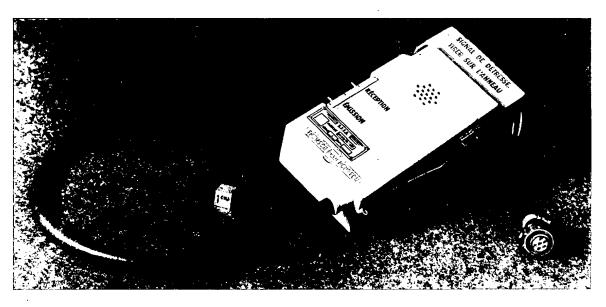
Telephone transmission:

Depress lower key: speak before the grid of the microphone-earpiece.

Telephone reception:

Depress upper key: listen in through the grid of the microphone-earpiece.

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TH. C. 986. Transistor version

TECHNICAL SPECIFICATIONS

Transmitter-receiver

- Frequency range: 238-248 Mc/s.
- Carrier power: 40 mW.
- Modulation ratio: 50 to 70 %.
- Electromagnetic microphoneearpiece.
- Tape antenna, half-wave (25 inches).
- Printed circuits on transmission and reception plates.

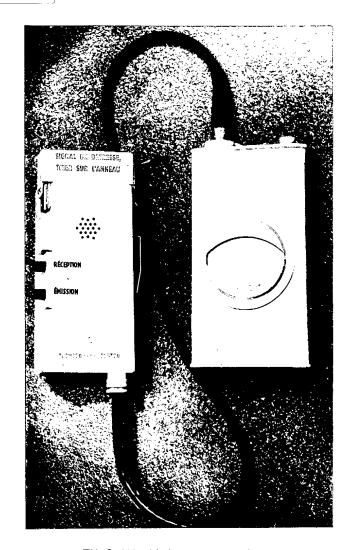
TH. C. 985 power supply

- Mercury battery: LT 1.25 V.
 - HT 130 V.
- Power per unit of mass: 80 Wh/kg.
- Transmitting power: 440 mA with LT. 16 mA with HT.
- Receiving power:
 220 mA with LT.
 5.5 mA with HT.

TH. C. 986 power supply

- Ordinary LT battery (1.5-6 volts) or zinc-silver secondary battery for instance,
- Power consumption: 450 mA.

A transistor converter is incorporated into this power supply pack.



TH. C. 985 with its power supply

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SPECIAL FEATURES

Telephony transmission:

- Directly heated "subminiature" tubes (1.25 V series).
- Amplitude modulation.
- Crystal-controlled oscillator stage.

Telephony reception TH. C. 985:

- Super-regeneration receiver.
- LF amplifier common to transmitter (telephony-telegraphy) and receiver.

Telegraphy transmission:

- A-2 automatic modulation.
- LF signal (about 1,500 c/s), chopped (1 to 2 c/s).

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RANGE

Under direct visibility conditions, a searching aircraft equipped with a VHF receiver of the French subminiature type with 1,750 channels, or ARC 34 type, detects signals from TH. C. 985/6 beacons:

- from 30 km in telephony,
- from 100-120 km in telegraphy.

